ABSTRACT

A mold with which a molded product in a desired shape with an aspherical curved surface is molded can be designed with high precision by correcting shape deformation of the molded product molded from the mold.

A mold 10 in which use surfaces 16 of an upper mold 11 and a lower mold 12 are formed to be design curved surfaces of the optical lens in a spherical shape is prepared. A curved surface shape of the optical lens molded from the mold is measured, a measured value is approximated by an equation (1) which is an equation of an aspherical surface and a curved surface of the molded optical lens is specified as an aspherical surface. Information corresponding to an error between the curved surface of the optical lens specified by the equation of the aspherical surface and the above-described design curved surface is compiled into database for each of characteristics of the optical lens as correction information for molding the optical lens of which curved surface is in the spherical shape. By using the correction information compiled into database, design values of the use surfaces in the upper mold and the lower mold of the mold with which the optical lens of which curved surface in the aspherical shape is molded are corrected to design them.

[Mathematical expression 10]

$$Z = \frac{C\rho^2}{1+\sqrt{1-(1+K)C^2\rho^2}} + \sum_{i=2}^{n} A_{2i}\rho^{2i} \qquad \text{———} \quad (1)$$